



# Certificate of Analysis

## Thaw and Culture Details

Cell Line Name	<b>STAN036i-49-2</b>	
WiCell Lot Number	<b>DB30900</b>	
Provider/Client	Stanford University – Laboratory of Dr. Marlene Rabinovitch	
Banked By	Stanford University – Laboratory of Dr. Marlene Rabinovitch	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 1 well of a 6 well plate using TeSR™-E8™ and Matrigel®. WiCell recommends passaging with ROCK Inhibitor	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: Essential 8™ Medium	Matrix: Matrigel®
Passage Number	p10 Cells were cultured for 10 passages prior to freeze and post colony selection. Plated cells at thaw should be labeled passage 11.	
Date Vialied	14-December-2015	
Vial Label	12/14/2015 E 49 D#####-### p SCVI49C2 P10 V#####	The label on vial only includes information applicable to the entire lot. “D#####-###” and “V#####” are vial specific and therefore are not included on this CoA.
Biosafety and Use Information	Appropriate biosafety precautions should be followed when working with these cells. The end user is responsible for ensuring that the cells are handled and stored in an appropriate manner. WiCell is not responsible for damages or injuries that may result from the use of these cells. Cells distributed by WiCell are intended for research purposes only and are not intended for use in humans.	



# Certificate of Analysis

## Results

Test Description	Test Provider	Test Method	Test Specification	Result
Karyotype	WiCell	G-T-L Banding performed on 20 metaphase cells	Expected karyotype	See Report
	<b>Results:</b> 46,XY <b>Interpretation:</b> This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.			
Post-Thaw Viable Cell Recovery	WiCell	Thaw using specified Thaw & Culture Recommendations	Recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega™	Defines STR profile of deposited cell line	See Report
Mycoplasma	WiCell	PCR	Amplification of mycoplasma specific DNA detected with negative result	Pass
Sterility	Steris	Native Product Direct Transfer using FTM and TSB (ST/07)	Negative for growth following 14 days of culture	Pass

## Testing Reported by Provider

Test Description	Method	Result
Identity	SNP	iPSCs match the donor material
Mycoplasma	Lonza MycoAlert™ kit	Negative

The Provider stated that the additional analysis listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA<sup>EX</sup>)

Approval Date	WiCell Quality Assurance Approval
01-December-2022	

**Date Reported:** Wednesday, November 23, 2022

**Cell Line Sex:** Male

**Cell Line:** STAN036i-49-2-DB30900

**Reason for Testing:** LOT\_RELEASE

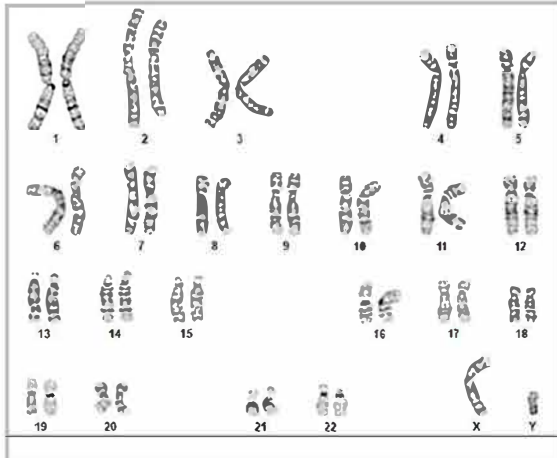
**Submitted Passage #:** 12

**Date of Sample:** 11/3/2022

**Investigator:** WiCell Stem Cell Bank, WiCell

**Specimen:** Human iPSC

**Results:** 46,XY



**Cell:** 59

**Slide:** G03

**Slide Type:** Karyotype

**Total Counted:** 20

**Total Analyzed:** 8

**Total Karyogrammed:** 4

**Band Resolution:** 450 - 500

**Interpretation:**

**This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.**

**Completed by:** Jennifer Pecos, CG(ASCP)

**Reviewed and Interpreted by:** Xiangqiang Shao, PhD

*For internal use only*

**Date:** \_\_\_\_\_ **Sent By:** \_\_\_\_\_ **Sent To:** \_\_\_\_\_ **QC Review By:** \_\_\_\_\_

*Limitations: This assay allows for microscopic visualization of numerical and structural chromosome abnormalities. The size of structural abnormality that can be detected is >3-10Mb, dependent upon the G-band resolution obtained from this specimen. For the purposes of this report, band level is defined as the number of G-bands per haploid genome. It is documented here as "band level", i.e., the range of bands determined from the four karyograms in this assay. Detection of heterogeneity of clonal cell populations in this specimen (i.e., mosaicism) is limited by the number of metaphase cells examined, documented here as "# of cells counted".*

*This assay was conducted solely for listed investigator/institution. The results of this assay are for research use only. Unless otherwise mutually agreed in writing, the services provided to you hereunder by WiCell Research Institute, Inc. ("WiCell") are governed solely by WiCell's Terms and Conditions of Service, found at [www.wicell.org/privacyandterms](http://www.wicell.org/privacyandterms). Any terms you may attach to a purchase order or other document that are inconsistent, add to, or conflict with WiCell's Terms and Conditions of Service are null and void and of no legal force or effect.*



# Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell  
Samples Received: 02Nov22, 03Nov22, 04Nov22  
STR Amplification Date: 07Nov22

Form SOP-89.01  
Version 9.0

Sample Name	CBiPS-6.13-PCBC-WB68020 p33	STAN036i-49-2-DB30900 p12	PENN008i-77-5-DB36507 p14	PENN018i-487-4-DB35031 p17
WiCell CTR No. <sup>1</sup>	94621	94593	94588	94587
FGA	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact <a href="mailto:info@wicell.org">info@wicell.org</a>			
TPOX				
D8S1179				
vWA				
Amelogenin				
Penta_D				
CSF1PO				
D16S539				
D7S820				
D13S317				
D5S818				
Penta_E				
D18S51				
D21S11				
TH01				
D3S1358				
Allelic Polymorphisms	26	28	26	29
Matches*	77507, 76855, 76813			
Comments				

*\*Note: The STR profile of the following sample is a 100% match for the given sample/samples unless otherwise specified.*

<sup>1</sup> CTR No.: Characterization Test Request Number; also known as a laboratory accessioning number.



# Short Tandem Repeat

Form SOP-89.01

Version 9.0

Requestor: WiCell Stem Cell Bank, WiCell  
Samples Received: 02Nov22, 03Nov22, 04Nov22  
STR Amplification Date: 07Nov22

**Assay Description:** STR analysis is performed using the PowerPlex 16 HS System by Promega™. Results are reported as 13 CODIS STR markers, Amelogenin for gender determination and two low-stutter, highly discriminating pentanucleotide STR markers.

**Results:** The genotypic profiles comprise a range of 26-29 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** The concentration of DNA required to achieve an acceptable STR genotype (signal/ noise) was equivalent to that required for the standard procedure (~1 ng/amplification reaction) from human genomic DNA. These results suggests that the cells submitted correspond to the cell lines as named and were not contaminated with any other human cells or a significant amount of mouse feeder layer cells.

**Sensitivity:** Sensitivity limits for detection of STR polymorphisms unique to either this or other human cell lines is ~2-4%.

11/17/2022	11/18/2022	11/17/2022
<b>X</b> Amber Kuhn	<b>X</b> Anna Lisa Larson	<b>X</b> Hunter Hefti
Tech #1 Characterization Signed by: Kuhn, Amber	Tech #2 Characterization Signed by: Larson, Anna Lisa	QA Review Quality Assurance Signed by: Hefti, Hunter

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# Mycoplasma Assay Report

PCR-based assay performed by WiCell  
WiCell Stem Cell Bank, WiCell  
04Nov22

Form SOP-83.01  
Version 5.0

Sample Name	Result	Interpretation
STAN036i-49-2-DB30900 p12 (94593)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN008i-77-5-DB36507 p14 (94588)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
PENN018i-487-4-DB35031 p17 (94587)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CBiPS-6.13-PCBC-WB68020 p33 (94621)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Assay Description
Sample is tested for presence of mycoplasma using EZ-PCR™ Mycoplasma Detection Kit (Sartorius).

11/4/2022	11/8/2022	11/10/2022
<b>X</b> Julia Graham <hr/> Tech #1 Characterization Signed by: Graham, Julia	<b>X</b> Justin Hobson <hr/> Tech #2 Characterization Signed by: Hobson, Justin	<b>X</b> Hunter Hefti <hr/> QA Review Quality Assurance Signed by: Hefti, Hunter

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*A gel image is available upon request.*

# Native Product Sterility Report



WiCell  
504 S Rosa Road, Rm 101  
Madison, WI 53719

SAMPLE #: 22090682  
DATE RECEIVED: 15-Sep-22  
TEST INITIATED: 15-Sep-22  
TEST COMPLETED: 29-Sep-22

SAMPLE NAME / DESCRIPTION: STAN311i-906C1-WB67956  
STAN358i-298C3-WB67955  
STAN036i-49-2-DB30900  
STAN035i-49-1-DB30894  
STAN175i-373C4-WB67963  
H1.CD43/CD144DR-WB67964  
PENN172i-M15-10-DB36105  
PENN131i-86-3-DB35107  
PENN052i-444-2-DB34988  
PENN133i-252-23-DB35139  
UNIQUE IDENTIFIER: NA

### TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	0	2 Negatives

### TEST SUMMARY:


# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
10	TSB	40	20-25	14
10	FTG	40	30-35	14

REFERENCE: Processed according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

REVIEWED BY 

DATE 30 Sep 2022

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. This test report shall not be reproduced, except in full, without prior written approval. Liability is limited to the costs of the tests. Results applied to samples as received.